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## Virus Detection and Removal Apparatus for Computer Networks

### Abstract of the Disclosure

A system for detecting and eliminating viruses on a computer network  
5 includes a File Transfer Protocol (FTP) proxy server, for controlling the transfer  
of files and a Simple Mail Transfer Protocol (SMTP) proxy server for controlling  
the transfer of mail messages through the system. The FTP proxy server and  
SMTP proxy server run concurrently with the normal operation of the system  
and operate in a manner such that viruses transmitted to or from the network in  
10 files and messages are detected before transfer into or from the system. The FTP  
proxy server and SMTP proxy server scan all incoming and outgoing files and  
messages, respectively before transfer for viruses and then transfer the files and  
messages, only if they do not contain any viruses. A method for processing a file  
before transmission into or from the network includes the steps of: receiving the  
15 data transfer command and file name; transferring the file to a system node;  
performing virus detection on the file; determining whether the file contains  
any viruses; transferring the file from the system to a recipient node if the file  
does not contain a virus; and deleting the file if the file contains a virus.